

REMARKS

The specification has been amended to correct grammatical errors on pages 2 and 5 of the application, and to supply the serial number of patent applications referenced in the paragraph bridging pages 3 and 4 of the application. No new matter is added.

Claims 1, 2, 9, 12-14, 18, 19, 21, and 22 have been amended, and new claims 23 and 24 have been added. The application now includes claims 1-24. A check is attached to satisfy the fee for two additional dependent claims. If additional fees are required to gain entry of this amendment, the Commissioner is authorized to charge attorney's deposit account 50-2041 (Whitham, Curtis & Christofferson).

Claim 1 requires that the conveyor element include a plurality of vessel holders (see particularly 6 in Figure 3 of the application) which are capable of holding a vessel (see particularly vessel 10 in the vessel holder 6 in Figure 5 of the application). Claim 1 also requires passive agitation through contact with the vessel agitator. This is described throughout the application, and particularly at page 2, line 2.

Claim 2 has been re-written into independent form (including all of the features of original claim 1), and to require that the vessels are moved in a direction generally perpendicular toward and away from the path. This is best illustrated in Figure 5 of the application where directional arrows A and B show movement toward and away from the path (arrow C). See also the application at page 5, lines 18 et seq.

Claims 9 and 12 have been amended for purposes of clarity. As shown in Figure 5 of the application, the projections project toward the conveyor.

Claim 13 has been amended to depend from now independent claim 2

Claims 14, 18, 19, and 21 have been amended to correct for antecedent basis.

Claim 22 has been amended to incorporate some of the features of now independent claim 2 into the method. As discussed above, movement toward and away from the conveyor element is illustrated by arrows A and B, and the Arrow C for the belt path.

New claims 23 and 24 require the conveyor to include a belt. This is best shown in Figures 3 and 5 of the application.

Claims 1-3, 6, 7, 10, 12, 13, 15, 16, 20 and 22 were rejected as being anticipated by U.S. Patent 6,837,843 to Gazeau, and claims 4, 5, 8, 9, 11, 14, 17-19, and 21 have been rejected as being obvious over Gazeau. Each of these rejections is traversed in view of the amendments above and remarks below:

Independent claim 1 and dependent claims 14, 15, and 17-21

Claim 1 has been amended to require that the conveyor element includes a plurality of vessel holders which are capable of holding a vessel which is selectively removable therefrom. This is best seen with reference to Figures 3 and 5 of the application where the vessel holders 6 are empty, and when the test vessels 10 are inserted into the vessel holders, respectively. Claim 1 also requires passive agitation through contact with the vessel agitator. This is best shown in Figure 5 of the application.

Gazeau et al. (US 6,837,843) discloses a centrifuge which provides for controlled agitation of the attached centrifuge buckets. Gazeau is used for the automated extraction of nucleic acid from blood samples.

The Examiner has equated element 11 to a “conveyer element”. However, this is not a correct interpretation of the claim language in claim 1 of the present application or application of the claim language to the Gazeau reference, and Gazeau does not fall within the scope of the recited claim. Specifically, claim 1 requires that the conveyor is moveable along said path. In sharp contrast, element 11 of Gazeau is a rotor to a centrifuge. The rotor is fixed in place and is not moveable along a path. Further, with respect to claim 15, since the rotor of Gazeau does not follow any path it could not follow a path with one or more turns.

To further differentiate Gazeau from the invention recited in claim 1, claim 1 has been amended to require the vessel holders with the removable vessels (as discussed in detail above). The pendulous tubes 1 of Gazeau can best be viewed as centrifuge buckets. As stated in paragraph [0058] of Gazeau et al. (US 6,837,843),

“All of these steps are performed in the equipment according to the invention **without removing the tubes from the rotor.**” This states very clearly that the tubes are fastened to the rotor and are not intended to be removable. In sharp contrast, claim 1 requires vessels which are removable from the vessel holders.

Claim 1 also requires passive agitation. As noted in the application with respect to Figure 5 of the application, the vessels are contacted by the agitator as they are moved along the path by the conveyor. In sharp contrast, Gazeau relies on an active drive (turning of element 18 to turn the rotor), and on an offset (17) to the axis. Hence, Gazeau’s mechanism is active, not passive.

Independent claims 2 and 22 and dependent claims 3-13, and 16

Claim 2 has been rewritten in independent format and to highlight that the troughs and projections cause the vessels to move in a direction generally perpendicular toward and away from said path. As noted above, Figure 5 of the application shows arrows A and B for movement of the vessels toward and away from the path (arrow C). Claim 22 has been amended to include some of the features of independent claim 2.

In sharp contrast, Figures 2 and 3 of Gazeau show the bottom of the pendulous tube 1 connected in the slot 15 of base 16 by stud 13. Thus, in the embodiment of Figures 2 and 3, the tubes of Gazeau are connected to the rotor at the top of the tube 1 and to the base at the bottom of the tube. In NO EVENT, is the tube 1 of Gazeau (in Figures 2 and 3) ever moved toward and away from a path. As noted above, the rotor 11 does not travel any path. Even if the slot 15 were interpreted as a path (which it cannot correctly because the slot does not MOVE along the path), the claim would still not be anticipated or obvious because the tube 1 always remains in the slot 15 (it does not move toward or away from the slot). The embodiment of Figure 1 of Gazeau is not on point either as it merely shows the ability to cause the tube to tip about its pivot 6, and in this embodiment, there is no movement toward and away from a path.

All remarks referencing the dependent claims of the application and the Gazeau reference are also not correct for the same reason (e.g., neither the rotor 11 nor the slot 15 MOVES along a path).

New dependent claims 23 and 24

As noted above, these two claims require that the conveyor element includes a belt. This is discussed, on page 5 of the application at line 3, and is shown in the application in Figures 2, 3 and 5. The configuration allows vessels 10 positioned in vessel holders 6 which are affixed to the belt to be conveyed past stationary agitator elements (see Figure 4) where, through contact, as shown in Figure 5, the vessels are caused to be agitated.

U.S. Patent 6,837,843 to Gazeau shows a centrifuge system where the "pendulous tubes (1)" are affixed to arms (10) by pivots (12). Gazeau wholly lacks a belt of any kind. Further, one would not substitute a belt for the rotor arms of Gazeau since Gazeau is relying on the offset pin 18 to drive the rotor arms in a manner which allows side-to-side movements of the tubes 1 while they are rotated.

In view of the foregoing, it is requested that the application be reconsidered, that claims 1 - 24 be allowed, and that the application be passed to issue.

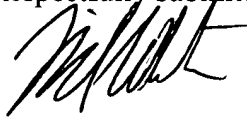
Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at 703-787-9400 (fax: 703-787-7557; email: mike@wcc-ip.com) to discuss any other changes deemed necessary in a telephonic or personal interview.

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If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041 (Whitham, Curtis & Christofferson).

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Michael E. Whitham', written over a horizontal line.

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